

WAWG SUPPLEMENT 1
CAPR 66-1
10 August 2010
Aircraft Maintenance
AIRCRAFT MAINTENANCE MANAGEMENT

CAPR 66-1, including change 4 dated 13 July 2010, is supplemented as follows:

## 1. (Added) Objectives.

This plan, used in conjunction with CAPR 60-1, CAPR 66-1 and CAPR 173-3, provides uniform guidelines for the operation and maintenance of corporate aircraft assigned to units within Washington Wing.

## 2. (Added) General.

- a. Aircraft Assignment: Aircraft assignment within the Wing will be determined by the following factors regarding the receiving unit:
  - (1) Unit's administrative capability,
  - (2) Unit's maintenance capability,
  - (3) Availability of a qualified unit maintenance officer (UMO),
  - (4) The ability of the unit to respond to mission needs,
- (5) Support facilities for the aircraft; e.g., hangar or tie-down, repair stations, IFR facilities,
- (6) Personnel to support the mission of the aircraft; i.e., pilots, observers, scanners, maintenance personnel,
  - (7) The financial posture of the unit,
- (8) The unit's willingness and ability to comply with National and Wing CAP directives, and
  - (9) The unit's ability to fly the assigned aircraft a minimum of 200 hours per year.
- b. The Washington Wing Aircraft Utilization Committee (AUC) will be responsible for making recommendations for aircraft assignment. The final decision regarding aircraft placement and assignment will be the prerogative of the Wing Commander.
- c. Temporary Aircraft Assignment: Any Corporate aircraft may be temporarily assigned or loaned to another unit by the Wing Commander. Details for such a transfer should be coordinated with the commander of the two units involved. Notification, including details of the transfer/loan, must be made to WAWG/DO and WAWG/LGM.
- d. Grounding of Aircraft: Any commander, pilot, safety officer, or UMO is authorized to ground aircraft that is deemed not to be airworthy. The person grounding an aircraft is required to immediately notify the UMO or unit commander of the grounding action who will in turn notify the Wing DO and LGM. The aircraft will **remain grounded** until the Wing LGM or designated custodial UMO defers or releases the aircraft back into service. The following are examples of reasons for grounding and aircraft:

- (1) Due for 100 hour or annual inspection.
- (2) Due for oil change.
- (3) Tire cord showing or splitting of the tire to the cord.
- (4) Missing bolts or cotter pins.
- (5) Loose cowling or wheel pants.
- (6) Missing or inoperative required instruments or equipment per FAR 91.213 (d)(iii), (2), (3ii), d(4).
- (7) Inoperative transponder and altitude reporting equipment (as required) per FAR 91.215.
  - (8) Nicks in the propeller equal to or greater than one-eight of an inch in depth.
- (9) Any item required for mission flights, the aircraft <u>WILL</u> be <u>MISSION</u> <u>GROUNDED</u> but not for non-mission related flights.
  - (10) Any item required for a safe flight.

## 3. (Added) Terms Explained.

- k. AIRCRAFT UTILIZATION COMMITTEE (AUC): The Washington Wing Aircraft Utilization Committee has been established by the Wing Commander to oversee operations of the aircraft assigned to this Wing by National Headquarters, CAP. The responsibility of the Committee is to monitor all factors of the fleet's operation. This includes, but is not limited to, assignment, maintenance procedures, aircraft proficiency flying rates, and resolution of other aircraft related issues. The members of the AUC are as follows:
  - (1) Vice Commander/CV
  - (2) Director of Operations/DO
  - (3) Wing Aircraft Maintenance Officer/LGM
  - (4) Wing Administrator/Recorder
- 1. Wing Aircraft Maintenance Officer: The Wing Aircraft Maintenance Officer (LGM) should be an FAA licensed A&P or Private Pilot, capable of managing the aircraft fleet, and available to the Unit Maintenance Officers of the units below the Wing level. The LGM is responsible for administering the day-to-day management of the aircraft fleet. These functions include but are not limited to the following:
  - (1) Coordinating aircraft repairs,
  - (2) Monitoring performance of Unit Maintenance Officers,
  - (3) Tracking aircraft maintenance status, history, and costs by tail number,
  - (4) Collecting and recording corporate aircraft monthly flying reports, and
  - (5) Reporting aircraft status to the Commander and the Director of Operations.
- m. Unit Maintenance Officer (UMO): The UMO should be an FAA licensed Private Pilot or A&P mechanic. The Unit Maintenance Officer will be required to possess a current copy of CAPR 60-1 and CAPR 66-1 as well as this supplement to CAPR 66-1 and be able to communicate with the Wing LGM by telephone, FAX, or electronic mail (e-mail) on a frequent basis. In addition, the UMO will perform the following:
  - (1) Coordinate all unit aircraft maintenance needs with the Wing LGM,
  - (2) Ensure that the assigned aircraft is mission-ready at all times,

- (3) Keep the Wing LGM informed of upcoming maintenance needs,
- (4) Coordinate work details to assure authorized aircraft cleaning and minor maintenance is performed,
  - (5) Report to the Wing LGM whenever the aircraft is grounded, and
  - (6) Ensure that all parts of this directive are complied with.
- 4a. (Added). WAWG Form 90, Aircraft Flight Status Report, will be used by Washington Wing Aircraft Custodian UMOs to report the flight status of aircraft on a monthly basis to Hq Washington Wing LGM. Submit it to the Washington Wing Administrator as an attachment to an email sent to wawa@wawg.cap.gov or by US Mail to Hq Washington Wing CAP, PO BOX 4459, JOINT BASE LEWIS-MCCHORD, WA 98438-0459. This Report is due on the 10<sup>th</sup> day of the month following the end of each month. This form is available on the wing website http://www.wawg.cap.gov. Click on "Forms Directory".
- 4b. (Added). WAWG Form 96, VOR Check Log, may be used to record the date of each aircraft VOR Check.
- 6a. (Added). Scheduled Maintenance.
- (1) Oil to be Used. All corporate aircraft will use Aeroshell 100 oil. Exceptions to the use of this oil include:
- (a) Oils recommended by the engine re-builder or manufacturer for use during engine break-in will be used if at all possible.
- (b) Aeroshell 60 or 80 (30W or 40W) oil may be used for operations in unusually cold weather if authorized by the Wing LGM.
  - (c) Multi-grade or synthetic oils will not be used.
- (d) In the event the above approved oil is not available, any oil meeting the standards specified in the aircraft POH may be used on a temporary basis.
  - 2) Oil Analysis. See paragraph 8c. of CAPR 66-1.
- 6e. (Added) Organizational Maintenance Corrosion Prevention.
- (1) All Washington Wing aircraft will have a corrosion prevention treatment performed bi-annually. A record of this treatment must appear in the airframe log book.
- (2) No person may operate the Blanik glider with a broken safety wire on the canopy emergency release. If the safety wire is broken the glider will be grounded until it is checked by a mechanic to ensure that the pins are properly inserted in the hinge and the safety wire is replaced.
- 6f. (Added) Aircraft Inspections, Periodic Inspections. Inspection Personnel. All Washington Wing aircraft are to be made available for inspection as required by the following Wing personnel: Commander, Director of Operations, Director of Safety, Wing Aircraft Maintenance Officer, Director of Logistics, and State Director (CAP-USAF) as well as the Mission Coordinator of an active mission, or any designee of the preceding personnel upon

request. These inspections do not relieve the pilot from performing a complete preflight inspection.

- 7d. (Added) All Pilots and UMOs will utilize the online eAircraft Discrepancy System located at the WMIRS website https://missions.cap.af.mil/wmirs/index.cfm. Instructions for use of the eAircraft discrepancy System are posted on the WMIRS website.
- 7f. (Added) Non-Scheduled Maintenance, Aircraft Security. The UMO is responsible for utilizing all anti-theft measures reasonably available. Precautions must also be taken to assure that the aircraft has minimum likelihood of being struck by aircraft or ground vehicles while tied down. The UMO will also notify the Wing DO and Wing LGM of the combinations used and procedures for accessing the aircraft and keys. A person not familiar with the field should be given the location of the aircraft in simple, understandable directions from obvious landmarks. The aircraft must be accessible at all times without the necessity of contacting any individual.
- 9f. (Added) Required Equipment, Survival Kit. Survival Kit Contents. The contents of the survival kit carried in each aircraft shall, as a minimum, contain the items listed in attachment 1 to this supplement. Annually the survival kit shall be inspected for completeness, expired items replaced, the kit weighed, and the weight marked on the kit exterior with the date of the latest weighing.
- 11. (Added) Records.
- a. Aircraft Maintenance Logbooks. Each aircraft will have a separate logbook for each of the following:
  - (1) Engine
  - (2) Airframe
  - (3) Propeller
  - (4) Avionics

These aircraft logbooks will not be left in the aircraft unless temporarily required for maintenance to be performed away from the assigned base of operations. The logbooks will be securely stored in the unit's files. It is the responsibility of the UMO to assure that the logbooks are safely stored and that all repairs, servicing, and other maintenance items are properly logged in the appropriate logbook and signed off by an authorized individual. The pilot or UMO receiving the aircraft after maintenance will ensure that the proper work was accomplished according to what was directed by the LGM. The Standardized National Flight Notebook (AIF) will normally serve as the onboard aircraft records, including maintenance status, in conjunction with the POH. The above listed logbooks shall be available to the PIC for the proposed flight, the Wing CC, Wing DO, Wing LGM, and State Director.

b. Standardized National Flight Notebook also known as Aircraft Information File (AIF). Each Washington Wing Corporate Aircraft will have a Standardized National Flight Notebook

or AIF. This notebook will contain all items National and Wing has authorized, including but not limited to:

- (1) All items located at http://www.cap.gov/visitors/members/operations/index.cfm?nodeID=6850&audienceID=4
- (2) WAWG Form 90 Aircraft Flight Status Report copies from the preceding 3 months
  - (3) Military Landing Permits
  - (4) Tax Exempt Documents

All pilots must ensure that the foregoing forms, items 1 through 4, are reviewed prior to each flight and are properly filled out following each flight. All pilots will further verbally report all discrepancies (squawks) to the UMO who will report them to the Wing LGM. The UMO will review the Flight Notebook weekly to ensure compliance with this directive and also to determine the maintenance status of the aircraft and assure that all entries in AIF EQP-Discrepancy Log are corrected or deferred. This review will be reported to the LGM and DO as described in the following paragraph by email at wawglgm@wawg.cap.gov and wawgdo@wawg.cap.gov with the status of the assigned aircraft (Mission or FAA up or down).

- c. Reports. At the end of each month, the UMO or his/her designee will collect the AIF FLT LOG3-Aircraft Flight Time Log(s) and AIF EQP-Discrepancy Log from the aircraft, correct them for errors and omissions, prepare the WAWG Form 90, Monthly Aircraft Flight Status Report, and send this report with a check request/reoccurring expense form issued by the squadron for all monies due to Wing HQ. This report, with the check request/reoccurring expense form, must arrive at Wing Headquarters by 1700 hours on or before the 10<sup>th</sup> day of the month. Late, erroneous, incomplete reports, or unpaid obligations are grounds for aircraft reassignment. These reports are to be done for both powered and glider aircraft. Units are advised to make photocopies of all reports for unit records. Online monthly reporting must be complied in accordance with CAPR 60-1 para 2-7.
- d. Aircraft Records. All aircraft records, flight logs, etc. are permanent aircraft records and, when no longer needed at the unit, will be forwarded to the Wing LGM for safekeeping. These records are required as a part of the maintenance history when the aircraft is transferred, sold, or otherwise disposed of. Invoices for work performed or purchases will be forwarded to the Wing Director of Finance within two days of the activity.
- e. Washington State Registration. Each corporate aircraft is registered with the State of Washington. Therefore, in addition to the documents required by the FAA (airworthiness, registration, POH, and weight and balance documents), the state registration certificate will be placed with those documents in the aircraft.
  - f. Financial Accounting Establishing Flying Hours Charges.
- (1) Aircraft Proficiency Flying Rates. The rates to be charged for flying CAP aircraft have been developed nationally and locally. They are \$37.00 for a C-182 and \$48.00 for a C-206. By direction of the National Commander these rates may change with a new publication.

The rates for non-funded flying "B" and "C" flights are \$42.00 for a C-182 and \$50.00 for a C-206 in Washington Wing to cover items that are not covered by the national reimbursement rates.

(2) Operating cost data are generated for the Washington Wing gliders and associated tow vehicles on a per launch basis. The costs will vary by tow vehicle type (aircraft or ground vehicle) and, in the case of a powered aircraft tow, altitude gained above runway altitude, and glider flight time. Only insufficient data is currently available from which to determine the operating costs for both the tow vehicle or tow aircraft and the gliders. Until comprehensive data is obtained, the charge per launch (tow vehicle or aircraft) for the Washington Wing gliders will be:

| (a) Altitude Gained (ft. AGL) | Launch Charge |
|-------------------------------|---------------|
| Ground Tow                    | \$ 5.00       |
| 0 to 3000                     | \$ 25.00      |
| 3100 to 4000                  | \$ 30.00      |
| 4100 to 5000                  | \$ 35.00      |
| 5100 to 6000                  | \$ 40.00      |

If the money collected exceeds the actual aircraft costs, the excess will be applied to the glider program costs. These monies will be used instead of normal hourly maintenance fees.

(b) Glider flight charges are based on flight time; defined as the elapsed time from the start of the takeoff roll until the glider comes to rest after landing. These charges are in addition to the launch charges and are:

| Flight Time (minutes) | <u>Charge</u> |       |
|-----------------------|---------------|-------|
| 0 to 18               | \$ 5.00       |       |
| 1 11'4' 1.10          | 1.1%          | 1 0 5 |

each additional 18 an additional \$ 5.00

Note: 18 minutes is 0.3 hours

Glider operational information and charges accrued will be reported for each launch using form AIF FLT LOG3-Aircraft Flight Time Log.

- (3) Members authorized to fly privately owned or rental aircraft on authorized missions must file for reimbursement as outlined in CAPR 173-3. The owner or renter is totally responsible for the aircraft maintenance. Rental expenses will not be paid.
- 13. (Added) Organizational Maintenance.
- d. The Unit Commander or the UMO will make requests for maintenance to the Wing LGM or his/her designee. The requestor should have information ready regarding the nature of the problem/repair and information as to the inspection status of the aircraft. The requestor is encouraged to make suggestions as to the Fixed Base Operator (FBO) where maintenance can be done. Only the LGM or the Wing Commander or their designee may authorize maintenance

action. If the maintenance request is approved, the LGM will issue a Maintenance Authorization Number. Any maintenance activity that may obligate the Wing in any way must receive a <u>Maintenance Authorization Number</u> assigned by the Wing LGM or his/her designee before that activity may be initiated. Units proceeding with maintenance activity without obtaining a Maintenance Authorization Number <u>must be prepared to pay for that activity or repair themselves</u>.

- e. Preventive and other Maintenance Activity. It is encouraged that member pilots or member A&P's perform these maintenance actions:
  - (1) Replacing lights (e.g., landing, taxi, beacon, strobe, panel),
  - (2) Inflating tires
  - (3) Replacing batteries,
  - (4) Other items requested by the Wing LGM
- f. Aircraft Cleanliness. It is the responsibility of the unit to which the aircraft is assigned to keep it clean at all times including the exterior, interior, and all window surfaces. Aircraft will be washed and waxed at a minimum every 6 months.
- g. Maintenance Flights. Maintenance flights are paid for by Wing <u>only when approved</u> <u>in advance of the flight</u> and a <u>Maintenance Flight Authorization Number</u> is assigned by the Wing LGM or his/her designee. This number must appear on the AIF FLT LOG3-Aircraft Flight Time Log and on the fuel slip as well as Hobbs hours flown. Upon completion of the flight, the Hobbs hours must be reported to the Wing LGM.
- 15b. (Added) Storage and Tie-Down, Ropes and Straps.
- (1) Tie-down ropes or straps will be replaced every five years, at most, or more often as dictated by their condition.
- (2) Gliders will be tied down correctly and when an extended time between use or when inclement weather is forecast, the glides will be either put in a covered area or dismantled and put in an appropriate trailer.
- 18. (Added) Cold Weather Operations. During cold weather (below 40 degrees F), a review of the aircraft's cold weather procedures will be conducted by the UMO with the unit pilots to include:
  - a. Preheating procedures,
  - b. Cold starting procedures,
  - c. Priming requirements and cautions,
  - d. Engine warm-up procedures, and
  - e. Aircraft surface deicing procedures.
- 19. (Added) Ground Handling and Engine Warm-up and Cool-Down Procedures.
- a. Ground Handing. All personnel will exercise extreme caution when ground-handling aircraft.

- (1) Anytime the aircraft is within ten feet of a structure, vehicle, or another aircraft, at least one other person must be available to monitor the wings and empennage of the aircraft during any ground movement.
- (2) A nose wheel tow-bar will be used whenever ground handling is necessary. Do not leave the tow bar attached on a parked aircraft.
- (3) For high wing aircraft, only the wing struts, the propeller near the spinner, and the tow-bar will be used as push or pull points. Do not lift the aircraft at the strut. For low wing aircraft (i.e. gliders), only the tow-bar will be used for a pull point while the wing leading edge may also be used as a push point. Pushing down on the horizontal stabilizer, vertical stabilizer, or aft fuselage in order to pivot a CAP aircraft is prohibited.
- b. Engine Warm-Up and Cool Down. Aircraft requiring that the engine be operated on the ground for warm-up or cool-down shall have such operations conducted no closer than 100 feet from any personnel, vehicle, or aircraft (except other aircraft in the run-up area near the runway). While these operations are occurring, at least one member of the aircraw must be observing the area around the exterior of the aircraft to ensure that personnel, vehicles, or aircraft do not approach the aircraft unobserved.

Approved by: WAWG/CC

## ATTACHMENT 1: Survival Kit Inventory List

| FOOD AND WATER                            |    | MEDICAL AND PROTECTION                     |    |
|---|----|--|----|
| Mainstay 2400 Food Ration – USCG          | 2  | Mosquito Head Nets                         | 2  |
| Mainstay Survival Water Ration – USCG     | 4  | Ben's 100 Insect Repellent                 | 1  |
| Wallistay Survivar Water Ration 2523      | •  | Emergency Bandage (Civilian)               | 1  |
| FOOD GATHERING                            |    | Emergency Bundage (Crymun)                 | •  |
| Best Glide Basic Emergency Fishing Kit    | 1  | BEST GLIDE EXPANDED MEDICAL KIT            |    |
| Katadyn Water Purification tabs – EPA     | 20 | Triple Antibiotic Ointment                 | 5  |
| Brass snare Wire (50 ft Length)           | 1  | Diotame-Antacid 262 mg tablet, 2 pack      | 2  |
| 2 Gal Water Carrier                       | 1  | Diamode Diarrhea Relief 2mg                | 2  |
| Flat Coffee Filters – Cone Style          | 3  | Diphen Antihistamine 25 mg                 | 5  |
| •   |    | Non Asprin, 2 packs                        | 5  |
| INFORMATION AND TRAINING                  |    | Asprin, 2 packs                            | 5  |
| Ultimate Survival Guide – Wiseman         | 1  | Electrolyte Tablets, 2 Packs               | 5  |
|   |    | Sun Screen, SPF 30, 1.5 gm Foil Packs      | 5  |
| SIGNALING AND NAVIGATION                  |    | String Relief Towlettes Individual Packs   | 3  |
| BCB Mayday Signal Mirror – NATO           | 1  | Band Aids, 1" x3", Plastic Latex Free      | 20 |
| VS17 Signal Panel – NSN                   | 1  | Gauze, 1" x 4.1 yds                        | 2  |
| Brunton Star Baseplate Compass            | 1  | Steri-Strip/Butterfly Bandages             | 5  |
| BCB NATO Survival Whistle                 | 1  | Triangular Bandage                         | 1  |
|   |    | Moleskin (6" x 6")                         | 1  |
| WARMTH AND SHELTER                        |    | Gauze Pads, 4 x 4                          | 5  |
| BCB Lifeboat Matches – NATO Approved      | 1  | Multi Trauma Dressing, 12" x 30"           | 1  |
| Best Glide Fresnel Lens Fire Starter      | 1  | Heavy Zip Lock Bag                         | 1  |
| Heatsheet 2 Person Survival Blanket       | 1  |  |    |
| Ranger Fire Flint – NATO Approved         | 1  | <u>ACCESSORIES</u>                         |    |
| Tinder Card Fire Starters                 | 18 | Heavy Duty Aluminum Foil (1.5" x 4")       | 1  |
| Best Glide Matches                        | 1  | Backpacker Sewing Kit                      | 1  |
|   |    | 50ft MilSpec 550 Paracord – NSN            | 1  |
| TOOLS AND SHARPS                          |    | Rite in the Rain Journal Notebook          | 1  |
| BCB Mini Work Tool                        | 1  | Best Glide Pencil                          | 1  |
| BCB Commando Wire Saw – NATO              | 1  |  |    |
| 3 in 1 Bottle/Can Opener                  | 1  | BAGS AND CONTAINERS                        |    |
| Folding Utility Knife (Orange) – NSN      | 1  | BG Survival Bag Med - MilSpec Construction | 1  |
|   |    | Silica Gel Desiccant                       | 3  |
| FLASHLIGHTS AND ILLUMINATION              |    | 9 x 6 Aloksak – US Navy Approved           | 3  |
| 12 Hour Cyalume Light Stick               | 1  |  |    |
| 30 Min High Intensity Cyalume Light Stick | 1  | <u>OTHER</u>                               |    |
| Photon Freedom Micro Light                | 1  | Coupon for 10% Discount                    | 1  |
|   |    | Survival Kit Tag and Return Service        | 1  |
|   |    |  |    |